Message

From: Pierce, Alison [Pierce.Alison@epa.gov]
Sent: 6/10/2021 4:53:11 PM
To: Henry, Tala [Henry.Tala@epa.gov]
CC: Schmit, Ryan [schmit.ryan@epa.gov]
Subject: RE: Firedrill: Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

Got it – thanks!

Alison Pierce
202.564.2437 (office) | pierce.alison@epa.gov

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Thursday, June 10, 2021 12:47 PM
To: Pierce, Alison <Pierce.Alison@epa.gov>
Cc: Schmit, Ryan <schmit.ryan@epa.gov>
Subject: Firedrill: Consolidated TA doc for Sen. Shaheen Emerging Contaminants/PFAS bill

[Request: advise how the PFAS definition on page 3 of the TA doc is the same or different than the OPPT and OECD definitions]

OPPT RESPONSE: As written, and as one commenter points out, the TA doc could be interpreted to cover (*"The term 'covered perfluoroalkyl substance' means"*) ten distinct PFAS substances: PFOA and three PFOA salts, PFOS and five PFOS salts. The TA doc specifically lists the ten rather than provide a category definition, whereas the TSCA and OECD definitions are the more general structure-based definitions.

The substances covered in the TA doc as written (PFOA, PFAS, and any or all of their salts) are within both the TSCA and OECD definitions (albeit small subsets of the TSCA universe and OECD universe of PFAS substances). The TA doc includes a linear C8 carboxylic acid and at least three of its salts, and a linear C8 sulfonic acid and at least five of its salts. In addition to linear carboxylic and sulfonic acids, OPPT and OECD also include branched, cyclic, ethers, polymers, etc.

REFERENCES

1. OPPT working definition: R-CF2-CFR'R" where the R's do not equal H
2. OECD definition: substance contains a CF2 or CF3
3. *"EPA Technical Assistance to Sen. Shaheen on PFAS Testing and Treatment Act of 2021"* doc

"(a) Definitions.—In this section:

* * *

"(2) COVERED PERFLUOROALKYL SUBSTANCE.—The term 'covered perfluoroalkyl substance' means—

"(A) perfluorooctanoic acid (commonly referred to as 'PFOA') (Chemical Abstracts Service No. 335–67–1);

"(B) the salts associated with the chemical described in subparagraph (A) (Chemical Abstracts Service Nos. 3825–26–1, 335–95–5, and 68141–02–6);

"(C) perfluorooctane sulfonic acid or sulfonate (commonly referred to as 'PFOS') (Chemical Abstracts Service No. 1763–23–1); and

"(D) the salts associated with the chemical described in subparagraph (C) (Chemical Abstracts Service Nos. 2795–39–3, 29457–72–5, 56773–42–3, 29081–56–9, and 70225–14–8).

What's specifically covered, as written:

- PFOA/perfluorooctanoic acid (Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-", CASRN 335–67–1)
- At least three salts of PFOA:
    - 3825–26–1 – ammonium salt of PFOA ("Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, ammonium salt (1:1)")
    - 335–95–5 – sodium salt of PFOA ("Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, sodium salt (1:1)")
    - 68141–02–6 – chromium 3+ salt of PFOA ("Octanoic acid, 2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-, chromium(3+) salt (3:1)")
    - Possibly other salts
- PFOS/perfluorooctane sulfonic acid ("1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-", CASRN 1763–23–1)
- At least five salts of PFOS:
    - 2795–39–3 – potassium salt of PFOS ("1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, potassium salt (1:1)")
    - 29457–72–5 – lithium salt of PFOS ("1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, lithium salt (1:1)")
    - 56773–42–3 – triethylethanaminium salt of PFOS ("Ethanaminium, N,N,N-triethyl-, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-1-octanesulfonate (1:1)")
    - 29081–56–9 – ammonium salt of PFOS ("1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, ammonium salt (1:1)")
    - 70225–14–8 – diethanolamine salt of PFOS ("1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, compd. with 2,2'-iminobis[ethanol] (1:1)")
    - Possibly other salts